



Chapter Two

Planning Factors and Performance Measure





SAFETEA-LU Planning Factors

The development of goals and objectives for any planning effort reflect the values and principles of the people of an area. They are also a means of measuring the relative success of implementing the proposed plan. When applying these goals and objectives to any effort, the decision makers will need to make tradeoffs between different goals and objectives.

The following goals and objectives have been formulated by an integration of previous BCATS goals and objectives along with the SAFETEA-LU seven planning factors that must be considered as part of the planning process for BCATS. The following factors have been explicitly considered, analyzed as appropriate, and reflected in the BCATS long range planning process.

BCATS Goal One/SAFETEA-LU Factor One

Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.

Objectives

1. Promote general economic development
2. Specifically improve or enhance tourism
3. Specifically improve or enhance the movement of freight and services
4. Improve or enhance the movement of workers
5. Provide new access to jobs and opportunities
6. Improve the value of residential or nonresidential properties
7. Encourage investments from the private sector
8. Improve access to terminals (sea, air, multimodal, etc)
9. Enhance the ability of the freight system to support product exports/imports

BCATS Goal Two/SAFETEA-LU Factor Two

Increase the safety and security of the transportation system for motorized and nonmotorized users.

Objectives

1. Reduce vehicular accidents and eliminate hazardous locations
2. Minimize rail/auto/transit/nonmotorized conflicts
3. Assist the monitoring or patrolling of the system
4. Increase access to accident incidences and/or disabled vehicles
5. Enhance or add to the system of bike lanes and sidewalks
6. Enhance the public safety of pedestrians
7. Contribute to a reduction in traffic volume
8. Improve the handling of hazardous materials movement



BCATS Goal Three/SAFETEA-LU Factor Three

Increase the accessibility and mobility of both people and freight.

Objectives

1. Provide enhanced or new capacity or mobility to the transportation system to move people
2. Provide enhanced or new accessibility to the transportation system to move people
3. Provide enhanced or new capacity or mobility to the transportation system to move freight
4. Provide enhanced or new accessibility to the transportation system to move freight
5. Enhance the range of freight service options available to local business
6. Provide appropriate access to and from major land uses
7. Minimize barriers to disadvantaged mobility-limited persons

BCATS Goal Four/SAFETEA-LU Factor Four

Protect and enhance the environment, promote energy conservation, improve quality of life and promote consistency between transportation improvements and State and local planned growth and economic development patterns.

Objectives

1. Reduce vehicle emissions
2. Reduce vehicle noise
3. Decrease fuel consumption
4. Add to the convenience or efficiency of the system
5. Specifically protect wetlands or other natural habitats
6. Decrease air or water pollution
7. Promote nonmotorized travel
8. Promote traffic calming measures
9. Support cultural and/or historic property retention or development
10. Support community cohesion and design
11. Promote environmental equity
12. Enhance development of brownfields
13. Conserve prime agricultural resources and open spaces
14. Planning consistent with local township and city land use plans



BCATS Goal Five/SAFETEA-LU Factor Five

Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight.

Objectives

1. Improve intermodal connectivity for people
2. Improve the integration/connectivity within people serving modes
3. Improve intermodal connectivity for freight
4. Improve the integration/connectivity within freight serving modes
5. Enhance the information/telecommunication networks that integrate freight and people serving modes

BCATS Goal Six/SAFETEA-LU Factor Six

Promote efficient system management and operation.

Objectives

1. Use Intelligent Transportation Systems (ITS) technology
2. Reduce transportation system cost
3. Contribute to better vehicle and commercial traffic counts
4. Enhance administrative productivity/efficiency
5. Enhance electronic processing of vehicle information
6. Provide technologies to alert traffic to road conditions/alternate routing

BCATS Goal Seven/SAFETEA-LU Factor Seven

Emphasize the preservation of the existing transportation system.

Objectives

1. Contribute to better system maintenance
2. Emphasize system rehabilitation rather than expansion
3. Incorporate new technologies
4. Maximize existing capacity
5. Optimize use of existing infrastructure to enhance service



Performance Measure

Performance Measures (PMs) are ways of determining whether implementation of the Metropolitan Transportation Plan (MTP) will bring BCATS closer to the adopted goals and objectives. PMs can be either quantitative or qualitative. Examples of quantitative PMs include: change in average speed, change in air quality emissions and change in congested Vehicle Miles Traveled (VMT). Following is each MTP goal followed by identification of the PMs.

BCATS Goal One/SAFETEA-LU Factor One

Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.

Performance Measure:

- Transit system operation cost per Household served; Transit operating cost per Passenger; Transit operating cost
- Passenger miles of travel
- Estimated Cost of Planned Improvements compared to Actual Project Costs for transportation projects within a range of 0.90 to 1.1
- Percentage of total transportation investment money that came from private sector
- Maintain Level Of Service (LOS) D or better on all major truck routes in the study area
- Monitor the freight traffic volumes along major commercial corridors

BCATS Goal Two/SAFETEA-LU Factor Two

Increase the safety and security of the transportation system for motorized and nonmotorized users.

Performance Measure:

- Incident rate statistics can be used to compare incident rates for the BCATS area to statewide rates over time.
- Work to reduce the number of non-standard traffic control devices
- Review incident rates to locate intersections needing traffic control devices
- Number of accidents at grade crossings; number of fatalities at grade crossings
- Review pedestrians and non-motorized with vehicle incidents
- Compliance with access management guidelines published by the Bureau of Transportation Planning



BCATS Goal Three/SAFETEA-LU Factor Three

Increase the accessibility and mobility of people and for freight.

Performance Measure:

- Percent of demand response fleet that is accessible per ADA guidelines
- Reduced fares to seniors and disabled persons
- Number of autoless households within walking distance of a bus route.
- Reduce travel time in target corridors; Travel time thresholds could be set and performance could be monitored; Before and after improvement comparisons could also be done to show how much a particular improvement contributes to overall system performance
- Percent of demand response pickups that are on time
- Number of employers with flexible work hours; number of rideshare customers; percent increase in rideshare customers
- Level of Service thresholds for each National Functional Class
- Number of miles at unacceptable LOS

BCATS Goal Four/SAFETEA-LU Factor Four

Protect and enhance the environment, promote energy conservation, and improve quality of life and promote consistency between transportation improvements and State and local planned growth and economic development patterns.

Performance Measure:

- Compliance with State and Federal Law including the Clean Air Act Amendments and the Clean Water Act
- The MTP takes into account other plans developed for the area, considers different modes of travel and promotes using land use techniques to help reduce the costs of transportation projects
- Assist in identification of potential environmental mitigation issues by acquiring, creating, and updating, as needed, geographic information system data layers for use by the implementing agencies



BCATS Goal Five/SAFETEA-LU Factor Five

Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight.

Performance Measure:

- The MTP takes into account other plans developed for the area, considers different modes of travel and promotes using land use techniques to help reduce the costs of transportation projects

BCATS Goal Six/SAFETEA-LU Factor Six

Promote efficient system management and operation.

Performance Measure:

- Vehicle Hours of Travel at Unacceptable LOS compared to Total Vehicle Hours of Travel. Commercial Vehicle Miles of Travel at Unacceptable LOS; Average Travel Rate for each Roadway Type or National Functional Class
- Lane Miles of deficient pavement by jurisdiction; Number (or percent) of deficient intersections by jurisdiction; Funds spent to retire these deficiencies (distribution by jurisdiction)
- Peak Period transit load factors by route; Peak Period available capacity by route; Peak headways by route
- Miles of Multi-Use Roadways (suitable for pedestrian, non-motorized and motorized traffic)
- Vehicle Hours of delay due to drawbridge and rail crossing

BCATS Goal Seven/SAFETEA-LU Factor Seven

Emphasize the preservation of the existing transportation system.

Performance Measure:

- Number of households, business, churches, historic sites disrupted, displaced, relocated due to transportation projects; Costs associated with these disruptions, displacements compared to benefits associated with the projects
- Increase the Percentage of Pavement Surface Evaluation and Rating (PASER) conditions to Good or better